Author index

Adcock, M.D., see Doncaster, H.D. (973) 176
Åkerlund, H.-E., see Sundblad, L.-G. (973) 47
Alpes, I., Scherer, S. and Böger, P.
The respiratory NADH dehydrogenase of the cyanobacterium *Anabaena variabilis*: purification and characterization (973) 41
Amesz, J., see Smit, H.W.J. (973) 212
Anderson, J.M., see Chow, W.S. (973) 105
Andréasson, L.-E.
Is nitrogen liganded to manganese in the photosynthetic oxygen-evolving system? EPR studies after isotopic replacement with ^{15}N (973) 465
Ångström, J., see Wydrzynski, T. (973) 23
Awayda, M.S., see Kidder III, G.W. (973) 59

Barber, J., see Gounaris, K. (973) 296
Baribeau, J., see Pande, C. (973) 257
Bendall, D.S., see Rolfe, S.A. (973) 220
Bobyleva-Guarriero, V., see Di Lisa, F. (973) 185
Böger, P., see Alpes, I. (973) 41
Bolgiano, B., Smith, L. and Davies, H.C.
Electron transport reactions in a cytochrome *c*-deficient mutant of *Paracoccus denitrificans* (973) 227
Boucher, F., see Pande, C. (973) 257
Breton, J. and Nabedryk, E.
Light-induced polarized Fourier transform infrared spectroscopy of bacteriorhodopsin - a study of the M_{412} intermediate by photoselection (973) 13
Brimble, S. and Bruce, D.
Pigment orientation and excitation energy transfer in *Porphyridium cruentum* and *Synechococcus* sp. PCC 6301 cross-linked in light state 1 and light state 2 with glutaraldehyde (973) 315
Browne, H.M., see McCormack, J.G. (973) 420
Bruce, D., see Brimble, S. (973) 315

Callender, R., see Pande, C. (973) 257
Čénas, N.K., Rakauskienė, G.A. and Kulys, J.J.
One- and two-electron reduction of quinones by glutathione reductase (973) 399
Chapman, D.J., see Gounaris, K. (973) 296
Che, C.M., see Cho, K.C. (973) 53
Cho, K.C., Chu, W.F., Choy, C.L. and Che, C.M.
Electron transfer between cytochrome *c* and metal hexacyanide complexes. Effect of thermodynamic driving force on the electron transfer rate (973) 53
Chow, W.S., Hope, A.B. and Anderson, J.M.
Oxygen per flash from leaf disks quantifies Photosystem II (973) 105
Choy, C.L., see Cho, K.C. (973) 53
Chu, W.F., see Cho, K.C. (973) 53
Crielaard, W., Hellingwerf, K.J. and Konings, W.N.
Reconstitution of electrochromically active pigment-protein complexes from *Rhodobacter sphaeroides* into liposomes (973) 205

Davies, H.C., see Bolgiano, B. (973) 227
Dawes, N.J., see McCormack, J.G. (973) 420
De Meis, L.
Role of water in the energy of hydrolysis of phosphate compounds – energy transduction in biological membranes (973) 333
De Smet, M., see Slooten, L. (973) 272
Di Lisa, F., Menabò, R., Miotto, G., Bobyleva-Guarriero, V. and Siliprandi, N.
Ca^{2+}-mediated action of long-chain acyl-CoA on liver mitochondria energy-linked processes (973) 185
Doncaster, H.D., Adcock, M.D. and Leegood, R.C.
Regulation of photosynthesis in leaves of C_4 plants following a transition from high to low light (973) 176
Drachev, L.A., Kaurov, B.S., Mamedov, M.D., Mulkidjanian, A.Y., Semenov, A.Y., Shinkarev, V.P., Skulachev, V.P. and Verkhovsky, M.I.
Flash-induced electrogenic events in the photosynthetic reaction center and bc_1 complexes of *Rhodobacter sphaeroides* chromatophores (973) 189
Droppa, M., see Rózsa, Z. (973) 350

Enami, I., Miyaoka, T., Mochizuki, Y., Shen, J.-R., Satoh, K. and Katoh, S.
Nearest neighbor relationships among constituent proteins of oxygen-evolving Photosystem II membranes: binding and function of the extrinsic 33 kDa protein (973) 35
Evelo, R.G., Styring, S., Rutherford, A.W. and Hoff, A.J.
EPR relaxation measurements of Photosystem II reaction centers: influence of S-state oxidation and temperature (973) 428

Fabian, M. and Malmström, B.G.
The effect of pH changes on the optical spectrum of oxidised cytochrome oxidase (973) 414
Feil, R., see Quick, P. (973) 263
Feil, R., see Stitt, M. (973) 241
Ferguson, S.J., see McEwan, A.G. (973) 308
Fonyó, A., see Ligeti, E. (973) 170
Frank, H.A., see Taremi, S.S. (973) 86
Freiberg, A., Godik, V.I., Pullerits, T. and Timpman, K.
Picosecond dynamics of directed excitation transfer in spectrally heterogeneous light-harvesting antenna of purple bacteria (973) 93

Godik, V.I., see Freiberg, A. (973) 93
Golbeck, J.H., see Parrett, K.G. (973) 324
Gounaris, K., Chapman, D.J. and Barber, J.
Isolation and characterisation of a D1/D2/cytochrome *b*-559 complex from *Synechocystis* 6803 (973) 296
Griebenow, K. and Holzwarth, A.R.
Pigment organization and energy transfer in green bacteria.1. Isolation of native chlorosomes free of bound bacteriochlorophyll *a* from *Chloroflexus aurantiacus* by gel-electrophoretic filtration (973) 235
Guard-Friar, D., Hanzlik, C. and MacColl, R.
Phycoerythrin 566 – a fluorescence study (973) 118
Gülzow, M., see Rehm, A.M. (973) 131

Halestrap, A.P.
The regulation of the matrix volume of mammalian mitochondria in vivo and in vitro and its role in the control of mitochondrial metabolism (973) 355
Hanzlik, C., see Guard-Friar, D. (973) 118
Hellingwerf, K.J., see Crielaard, W. (973) 205
Ho, K.-K., see Tan, S. (973) 111

Hoff, A.J., see Evelo, R.G. (973) 428
Holzwarth, A.R., see Griebenow, K. (973) 235
Hope, A.B., see Chow, W.S. (973) 105
Horváth, G., see Rózsa, Z. (973) 350
Hudig, H., see McEwan, A.G. (973) 308
Hunter, C.N., Van Grondelle, R. and Van Dorssen, R.J.
The construction and properties of a mutant of *Rhodobacter sphaeroides* with the LH1 antenna as the sole pigment protein (973) 383

Ikeuchi, M., see Tamura, N. (973) 281
Inagaki, K., see Sugio, T. (973) 250
Inoue, Y., see Inui, T. (973) 147
Inoue, Y., see Ono, T.-a. (973) 443
Inoue, Y., see Tamura, N. (973) 281
Inui, T., Kawamori, A., Kuroda, G., Ono, T.-a. and Inoue, Y.
EPR study of charge recombination via D^+ in the S_2 state of oxygen evolving Photosystem II (973) 147

Jackson, J.B., see McEwan, A.G. (973) 308
Jagendorf, A.T., see Larson, E.M. (973) 67
Jagendorf, A.T., see Larson, E.M. (973) 78

Kamiya, N., see Tanisho, S. (973) 1
Karukstis, K.K. and Monell, C.R.
Reversal of quinone-induced chlorophyll fluorescence quenching (973) 124
Katagiri, T., see Sugio, T. (973) 250
Katoh, S., see Enami, I. (973) 35
Katoh, T., see Mimuro, M. (973) 153
Kaurov, B.S., see Drachev, L.A. (973) 189
Kawamori, A., see Inui, T. (973) 147
Kidder III, G.W. and Awayda, M.S.
Effects of azide on gastric mucose (973) 59
Kim, H., see Park, D.-G. (973) 19
Kim, K., see Park, D.-G. (973) 19
Klaassen, H.E., see Vos, M.H. (973) 163
Konings, W.N., see Crielaard, W. (973) 205
Konstantinov, A., see Vygodina, T. (973) 390
Kulys, J.J., see Čėnas, N.K. (973) 399
Kuroda, G., see Inui, T. (973) 147

Larson, E.M. and Jagendorf, A.T.
Sulfite stimulation of chloroplast coupling factor ATPase (973) 67
Larson, E.M., Umbach, A. and Jagendorf, A.T.
Sulfite-stimulated release of [^{3}H]ADP bound to chloroplast thylakoid ATPase (973) 78
Lavorel, J., Richaud, P. and Verméglio, A.
Interaction of photosynthesis and respiration in Rhodospirillaceae: evidence for two functionally distinct b-c_1 complex fractions (973) 290
Leegood, R.C., see Doncaster, H.D. (973) 176
Levine, Y.K., see Van Gurp, M. (973) 405
Ligeti, E. and Fonyó, A.
Phosphate transport protein of rat heart mitochondria: location of its SH-groups and exploration of their environment (973) 170

MacColl, R., see Guard-Friar, D. (973) 118
Malmström, B.G., see Fabian, M. (973) 414
Mamedov, M.D., see Drachev, L.A. (973) 189
McCormack, J.G., Browne, H.M. and Dawes, N.J.
Studies on mitochondrial Ca^{2+}-transport and matrix Ca^{2+} using fura-2-loaded rat heart mitochondria (973) 420
McEwan, A.G., Richardson, D.J., Hudig, H., Ferguson, S.J. and Jackson, J.B.
Identification of cytochromes involved in electron transport to trimethylamine *N*-oxide/dimethylsulphoxide reductase in *Rhodobacter capsulatus* (973) 308
Mehari, T., see Parrett, K.G. (973) 324
Menabò, R., see Di Lisa, F. (973) 185
Mimuro, M., Yamazaki, I., Tamai, N. and Katoh, T.
Excitation energy transfer in phycobilisomes at −196 °C isolated from the cyanobacterium *Anabaena variabilis* (M-3): evidence for the plural transfer pathways to the terminal emitters (973) 153
Minkov, I.B. and Strotmann, H.
The effect of azide on regulation of the chloroplast H^+-ATPase by ADP and phosphate (973) 7
Miotto, G., see Di Lisa, F. (973) 185
Miyaoka, T., see Enami, I. (973) 35
Mochizuki, Y., see Enami, I. (973) 35
Monell, C.R., see Karukstis, K.K. (973) 124
Moody, A.J. and Rich, P.R.
The functional catalytic unit involved in proton pumping by rat liver cytochrome-*c* reductase and by cytochrome-*c* oxidase (973) 29
Moritani, C., see Sakai, Y. (973) 450
Mulkidjanian, A.Y., see Drachev, L.A. (973) 189

Nabedryk, E., see Breton, J. (973) 13
Nam, S.S., see Park, D.-G. (973) 19
Neuhaus, E., see Quick, P. (973) 263

Ono, T.-a. and Inoue, Y.
Removal of Ca by pH 3.0 treatment inhibits S_2 to S_3 transition in photosynthetic oxygen evolution system (973) 443
Ono, T.-a., see Inui, T. (973) 147

Pande, A., see Pande, C. (973) 257
Pande, C., Callender, R., Baribeau, J., Boucher, F. and Pande, A.
Effect of lipid–protein interaction on the color of bacteriorhodopsin (973) 257
Park, D.-G., Nam, S.S., Kim, K. and Kim, H.
Effect of high pressure on the light-induced structural change of bacteriorhodopsin reconstituted in liposome (973) 19
Parrett, K.G., Mehari, T., Warren, P.G. and Golbeck, J.H.
Purification and properties of the intact P-700 and F_X-containing Photosystem I core protein (973) 324
Paschenko, V.Z., see Stahl, U. (973) 198
Prat-Gay, G. and Wolosiuk, R.A.
Differential reactivity of chloroplast fructose-1,6-bisphosphatase to Woodward's reagent K and diethylpyrocarbonate (973) 457
Pullerits, T., see Freiberg, A. (973) 93

Quick, P., Neuhaus, E., Feil, R. and Stitt, M.
Fluoride leads to an increase of inorganic pyrophosphate and an inhibition of photosynthetic sucrose synthesis in spinach leaves (973) 263

Rakauskiené, G.A., see Čėnas, N.K. (973) 399
Rehm, A.M., Gülzow, M. and Ried, A.
Changes in the photosynthetic apparatus of red algae induced by spectral alteration of the light field. I. A decrease in the apparent quantum yield of PS I caused by preillumination with light 1 (973) 131
Rich, P.R., see Moody, A.J. (973) 29
Richardson, D.J., see McEwan, A.G. (973) 308
Richaud, P., see Lavorel, J. (973) 290
Ried, A., see Rehm, A.M. (973) 131
Rolfe, S.A. and Bendall, D.S.
The role of an extrinsic 9 kDa polypeptide in oxygen evolution by Photosystem II particles from *Phormidium laminosum* (973) 220
Rózsa, Z., Droppa, M. and Horváth, G.
On the origin of the thermoluminescence band at around +50 °C in isolated subchloroplast particles (973) 350

Rutgers, M., Van der Gulden, H.M.L. and Van Dam, K.
Thermodynamic efficiency of bacterial growth calculated from growth yield of *Pseudomonas oxalaticus* OX1 in the chemostat (973) 302
Rutherford, A.W., see Evelo, R.G. (973) 428

Sakai, Y., Moritani, C., Tsuda, M. and Tsuchiya, T.
A respiratory-driven and an artificially driven ATP synthesis in mutants of *Vibrio parahaemolyticus* lacking H^+-translocating ATPase (973) 450
Satoh, K., see Enami, I. (973) 35
Satoh, K., see Takahashi, Y. (973) 138
Scheibe, R., see Stitt, M. (973) 241
Scherer, S., see Alpes, I. (973) 41
Schröder, W.P., see Sundblad, L.-G. (973) 47
Semenov, A.Y., see Drachev, L.A. (973) 189
Shen, J.-R., see Enami, I. (973) 35
Shinkarev, V.P., see Drachev, L.A. (973) 189
Siliprandi, N., see Di Lisa, F. (973) 185
Skulachev, V.P., see Drachev, L.A. (973) 189
Slooten, L., De Smet, M. and Sybesma, C.
Sulfide-dependent electron transport in thylakoids from the cyanobacterium *Oscillatoria limnetica* (973) 272
Smit, H.W.J., Van Dorssen, R.J. and Amesz, J.
Charge separation and trapping efficiency in membranes of *Heliobacterium chlorum* at low temperature (973) 212
Smith, L., see Bolgiano, B. (973) 227
Stahl, U., Tusov, V.B., Paschenko, V.Z. and Voigt, J.
Spectroscopic investigations of fluorescence behaviour, role and function of the long-wavelength pigments of Photosystem I (973) 198
Stitt, M., Scheibe, R. and Feil, R.
Response of photosynthetic electron transport and carbon metabolism to a sudden decrease of irradiance in the saturating or the limiting range (973) 241
Stitt, M., see Quick, P. (973) 263
Strotmann, H., see Minkov, I.B. (973) 7
Styring, S., see Evelo, R.G. (973) 428
Sugio, T., Katagiri, T., Inagaki, K. and Tano, T.
Actual substrate for elemental sulfur oxidation by sulfur:ferric ion oxidoreductase purified from *Thiobacillus ferrooxidans* (973) 250
Sundblad, L.-G., Schröder, W.P. and Åkerlund, H.-E.
S-state distribution and redox state of Q_A in barley in relation to luminescence decay kinetics (973) 47
Sybesma, C., see Slooten, L. (973) 272

Takahashi, Y. and Satoh, K.
Identification of the photochemically iodinated amino-acid residue on D1-protein in the Photosystem II core complex by peptide mapping analysis (973) 138
Tamai, N., see Mimuro, M. (973) 153
Tamura, N., Ikeuchi, M. and Inoue, Y.
Assignment of histidine residues in D1 protein as possible ligands for functional manganese in photosynthetic water-oxidizing complex (973) 281
Tan, S. and Ho, K.-K.
Purification of an acidic plastocyanin from *Microcystis aeruginosa* (973) 111
Tanisho, S., Kamiya, N. and Wakao, N.
Hydrogen evolution of *Enterobacter aerogenes* depending on culture pH: mechanism of hydrogen evolution from NADH by means of membrane-bound hydrogenase (973) 1
Tano, T., see Sugio, T. (973) 250
Taremi, S.S., Violette, C.A. and Frank, H.A.
Transient optical spectroscopy of single crystals of the reaction center from *Rhodobacter sphaeroides* wild-type 2.4.1 (973) 86
Timpman, K., see Freiberg, A. (973) 93
Tsuchiya, T., see Sakai, Y. (973) 450
Tsuda, M., see Sakai, Y. (973) 450
Tusov, V.B., see Stahl, U. (973) 198

Umbach, A., see Larson, E.M. (973) 78

Van Dam, K., see Rutgers, M. (973) 302
Van der Gulden, H.M.L., see Rutgers, M. (973) 302
Van Dorssen, R.J., see Hunter, C.N. (973) 383
Van Dorssen, R.J., see Smit, H.W.J. (973) 212
Van Ginkel, G., see Van Gurp, M. (973) 405
Van Gorkom, H.J., see Vos, M.H. (973) 163
Van Grondelle, R., see Hunter, C.N. (973) 383
Van Gurp, M., Van Ginkel, G. and Levine, Y.K.
Fluorescence anisotropy of chlorophyll *a* and chlorophyll *b* in castor oil (973) 405
Vänngård, T., see Wydrzynski, T. (973) 23
Verkhovsky, M.I., see Drachev, L.A. (973) 189
Verméglio, A., see Lavorel, J. (973) 290
Violette, C.A., see Taremi, S.S. (973) 86
Voigt, J., see Stahl, U. (973) 198
Vos, M.H., Klaassen, H.E. and Van Gorkom, H.J.
Electron transport in *Heliobacterium chlorum* whole cells studied by electroluminescence and absorbance difference spectroscopy (973) 163
Vygodina, T. and Konstantinov, A.
Effect of pH on the spectrum of cytochrome *c* oxidase hydrogen peroxide complex (973) 390

Wakao, N., see Tanisho, S. (973) 1
Warren, P.G., see Parrett, K.G. (973) 324
Wolosiuk, R.A., see Prat-Gay, G. (973) 457
Wydrzynski, T., Ångström, J. and Vänngård, T.
H_2O_2 formation by Photosystem II (973) 23

Yamazaki, I., see Mimuro, M. (973) 153